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(54) Title: LITHIUM METAL OXIDE ELECTRODES FOR LITHIUM CELLS AND BATTERIES

(57) Abstract: A lithium metal oxide positive electrode for a non-aqueous lithium cell or battery is disclosed. The positive electrode comprises a lithium metal oxide having a layered structure and a general formula, after in-situ or ex-situ oxidation, of $\text{Li}_x\text{Mn}_y\text{M}_{1-y}\text{O}_2$ wherein $0 \leq x \leq 0.20$, $0 < y < 1$, manganese is in the 4+ oxidation state, and M is one or more the first row transition metals: Ti, V, Cr, Mn, Fe, Co, Ni or Cu, or other specific other canons: Al, Mg, Mo, W, Ta, Si, Sn, Zr, Be, Ca, Ga, and P, which have an appropriate ionic radii to be inserted in to the structure without unduly disrupting it. Usage of the materials of the invention in lithium cells and batteries is disclosed. A process is disclosed for formation of materials of the invention.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 16, 8 May 2001 (2001-05-08) & JP 2001 023617 A (SEIMI CHEM CO LTD), 26 January 2001 (2001-01-26) abstract	1-10
X	WO 01/28010 A (YOO, YEONG-CHANG; SEUNG, DO-YOUNG; DAVIDSON, ISOBEL) 19 April 2001 (2001-04-19) page 14, lines 26-28 examples 2,4	1-10

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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